From: Little, Shauna
To: Curley, Michael
Subject: FW: Incorporating increase precipitation into SW permits
Date: Friday, February 05, 2021 8:47:36 AM
Attachments: 2021 MSGP Response to Comments.pdf
image00001.png

<!--[if lte mso 15 || CheckWebRef]-->
Little, Shauna has shared a OneDrive for Business file with you. To view it, click the link below.

2021 MSGP Response to Comments.pdf

<!--[endif]-->
This looks editable so either open locally on your computer or be very careful.
-S

From: Gray, Davidj <gray.davidj@epa.gov>
Sent: Friday, February 05, 2021 8:41 AM
To: Little, Shauna <Little.Shauna@epa.gov>
Subject: Re: Incorporating increase precipitation into SW permits

Hi Shauna,

The RTC is final but I was waiting for it, as well as waiting to learn if it could be shared publicly before it is published in the FR. I just received it and have attached it for you - See Parts 2.1.1.RFC8 and CIA.V.D, beginning on Pages 372 and 1438. I'm still waiting to learn if it can be made public prior to the FR.

Dave

From: Little, Shauna <Little.Shauna@epa.gov>
Sent: Thursday, February 4, 2021 3:46 PM
To: Gray, Davidj <gray.davidj@epa.gov>
Subject: RE: Incorporating increase precipitation into SW permits

Thanks Dave,

Are you saying that the RTC has not been finalized or that I am not allowed to see any of it until it is published in the FR?

CLF just submitted extremely similar comments on the Sprague drafts regarding the Major Storm Events provision and we anticipate the same for Chelsea. However, because I have already updated the permit language to reflect the final 2021 wording more closely for the Chelsea permits, I need content for that change and would prefer to say something consistent with EPA's RTC for this change.

Regards,

Shauna Little

Physical Scientist
Water Division

U.S. EPA Region 1
Phone: (617) 918-1989

From: Gray, Davidj <gray.davidj@epa.gov>
Sent: Thursday, February 04, 2021 3:27 PM
To: Little, Shauna <Little.Shauna@epa.gov>
Subject: Re: Incorporating increase precipitation into SW permits

Hi Shauna - I'm still waiting for the RTC document release (only goes to docket once published in FR), but relevant comments are available here (searchable by comment number) and a summary of comments received is included below:

Major storm preparedness (request for comment 8)

- Supports
  - Supports the proposed language that facilities should consider implementing enhanced controls to minimize impacts from major storm events that cause extreme flood conditions. (3)(0205)(0229)(0130)(0174)
  - Supports, but requests EPA include limitations by container type, size, and other potentially protective features; notes that the Floodplain Administrator may already have similar controls that would be adequate to meet MSGP requirements (0174)
  - Support, use of flood plain map seems like a good idea
  - Agree with developing a formal plan for major storms in conjunction with the SWPPP
  - Using FEMA maps is a good idea (4), EPA should require identification of all water wells too in areas where flooding occurs at sites that intend to infiltrate SW
- Does not support
  - Opposed to enhanced control measures for extreme flooding. (4) (0158; 0210; 0212, 0180, 0179; 0245); Disagrees with the major storm event proposals. (0260)
  - Doesn't support, not clear what constitutes a violation. Should be at discretion of person developing SWPPP. (0228)
  - Concerned that this addition is subjective and unnecessary in some areas, "inappropriate for the MSGP" and should be addressed somewhere else.
  - POTWs are traditionally located in low-lying topography and have experience with flood and including requirements in the MSGP that could conflict or impede with already existing efforts seems "inappropriate." (0230)
  - Outside the Scope
    - Do not believe that the water quantity requirements should be included in a water quality permit and it should be managed by other entities such as the state or the local stormwater management control program. (0209)
    - Outside scope of authority under CWA because attempting to regulate

flowrate and volume as a pollutant
        - Doesn't support. Not based on discharge quality. Some prescribed measures impractical for Sector P facilities. Instead EPA should provide guidance on matter. (0249)
        - Language seems unlawfully narrow in scope, because it appears to be less stringent than the previous permit and therefore unlawful under the CWA anti-backsliding prohibitions. (0200)
    - Redundant:
        - Already addressed in other state and local requirements.(2) (0244) Places accountability for impacts of rising sea levels on the permittee.
        - Would be redundant. The majority of Sector Q and R facilities are located adjacent to the water so major storm events are already considered. Requiring more controls would unnecessarily burden facilities financially and timewise.
        - Unnecessary, most flood plain facilities already have systems in place. Language is vague. Facilities already have to comply with local and state regulations. (3) (0235, 0248, 0182)
        - Does not support, proposed enhancements are unnecessary and should not be adopted as they would do little to prevent discharges during major storms and would impose an unnecessary burden on permittees. (0236)
        - MSGP already has requirements for corrective action and requiring modification of control measures in event of recurring flooding. Many facilities already use FEMA flood maps. EPA should provide guidance on using the 100-year flood event to predict pollution prevention. (0170)
    - The permit should not include any significant new requirements for flood-prone areas.
    - Concerns about using the flood maps
        - Extreme weather conditions that include a 100-year and 50-year storm fall outside the permit's five year term. (-0193)
        - Manner that FEMA maps are relied on unlawfully weakens the effluent limitations by narrowing the universe of flood data that must be considered. (0200)
            - Comments 0200-A1 0200-A3, and 0200-A4 provide lots of rational and further explanation.
            - FEMA maps are often inaccurate and undersell the risk of flooding in many areas. Other information must also be used in determining whether an area is at risk for flooding. DCN –0220 outlines additional information to consider. (0220)
    - Opposes the mandate because it distinguishes the types of BMPs that might be used based on a permittee location. (0222)
    - This requirement is beyond the scope that many facilities to prepare for and is

too far-reaching. This should be left to a facility to come up with a reasonable approach (2). To delay delivery until after a storm event when delivery is expected within 48-hours is entirely unworkable in certain portions within the country during rainy season. (0158)
    - Opposed for using FEMA 100 or 500 year flood maps. Only should apply to higher risk flood areas, such as 25 year flood areas. FEMA maps not available in some rural areas. (0231)
    - Proposed temporary measures to accommodate major storm events weakens the permit because it assumes the facility will flood implying more permanent measures are unnecessary. (0200)
        - Comments 0200-A1 0200-A3, and 0200-A4 provide lots of rational and further explanation.
- Alternatives
    - Could be guidance instead (2) (0249 too); conflicting with city design standards for the same topic
    - Remove "major" and "extreme" as facilities should consider these controls for any flood conditions (0130)
    - Would be better addressed at the local level through municipal separate storm sewer systems
    - Should be a recommendation not a requirement (2) (0227) if the facility is maintaining a SWPPP and has not received and NOV.
    - Recommends that permit advise covered facilities in FEMA classified flood zones to consider containment and best management practices. (0202)
    - The controls required by the permit are needed, but not controls for extraordinary events like the 500-year storm (2)(0212).
    - Don't require for facilities outside of flood plain. (0258)
    - Recommended revision of applicability and control measures, detailed in DCN – 0255 (0255)
    - Language should be strengthened by underscoring existing obligations requiring applicants to use good engineering practices, disclose information in their possession, and consider all reasonably available data and information, and thoroughly document present-day and future flood risks (2)(0200, 0220)
- Comments 0200-A1 0200-A3, and 0200-A4 provide lots of rational and further explanation.
    - Areas that have flooded in the last 20 years should be ineligible for No Exposure certification
- Recommends a focus on specific facilities that pose a high hazard risk during major flood events if they fail (0261)Recommended excluding from major storms zone X (shaded) [not sure what that is??] (0174)
    - Suggests revisions to allow flexibility to determine suitable measures that account for local conditions. EPA could consider other regulatory programs (e.g., SPCC

regulations use 24-hour, 25-year storm event), NOAA's dataset on precipitation trends to set thresholds, and local mitigating factors (elevation, land use, or proximity to FEMA Special Flood Hazard Area). (0194)

- Clarifications Needed and Additional Recommendations
  - Guessing which storms will be severe and when delays in delivery will apply could be confusing
  - What does the term "consider" mean? (2) Doesn't seem like this will be enforceable or result in real environmental benefit. Standard is not clear. "Consider" does not lead to concrete action. (0130);
  - Confused about the expectations for compliance due to the terms "major storm events" and "extreme flooding conditions."
  - The definitions of "major storm" and "extreme flooding event" are not proposed and are not clear. (2) (0245; 0174)
  - Include age and updates of FEMA flood plain map in MSGP. Flood information and control effectiveness should be SWPPP. (0219)
  - Need clarification for how facilities determine if operators have risk of extreme flooding if location not included in FEMA flood map service center (0181)
  - Does not require consideration of ALL climate change-related impacts. (0200)
    - Comments 0200-A1 0200-A3, and 0200-A4 provide lots of rational and further explanation.
- Recommendations to Change Cost Analyses
  - Suggest revising cost assessment for this to account for need to hire certified flood manager and PE to address proposed mandatory criteria in (b) and (d); for (e) these could be very costly and could be addressed through non structural controls; concerns about delays caused by 2.1.1.8.c; recommend acknowledging that existing regulations may already address 2.1.1.8.g and h (0174)
  - Comments on specific inadequacies of cost analysis for this requirement (0174)

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From: Little, Shauna <Little.Shauna@epa.gov>
Sent: Thursday, February 4, 2021 2:46 PM
To: Gray, Davidj <gray.davidj@epa.gov>
Subject: RE: Incorporating increase precipitation into SW permits

Hi Dave,
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Would you be able to share any public comments and EPA responses to comments pertaining to this provision? Michael and I are adjusting this provision as you've noted, but RTC language would prove useful for our fact sheets.

Regards,
Shauna Little
Physical Scientist
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Phone: (617) 918-1989

From: Gray, Davidj <gray.davidj@epa.gov>
Sent: Friday, January 15, 2021 12:43 PM
To: Houlihan, Damien <houlihan.damien@epa.gov>
Cc: Little, Shauna <Little.Shauna@epa.gov>
Subject: Re: Incorporating increase precipitation into SW permits

Hi Damien & Shauna -

Following up on discussions regarding the subject topic we had some time ago, the 2021 MSGP will be finalized today and become effective on March 1st. The final language is largely as proposed and will require that operators consider implementing enhanced stormwater control measures for facilities that could be impacted by major storm events, such as hurricanes, storm surge, and flood events. The permit will not require operators to implement additional controls if the operator determines such controls to be unnecessary, but it will require operators to consider the benefits of selecting and designing control measures that reduce risks to their industrial facility and the potential impact of pollutants in stormwater discharges caused by major storm events. See excerpt below that highlights relevant language and indicates revised final text in red:

> 2. Control Measures and Effluent Limits
> In the technology-based limits included in Parts 2.1 and 8, the term "minimize" means to reduce and/or eliminate to the extent achievable using stormwater control measures (SCMs) (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice. The term "infeasible" means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.
> 2.1 Stormwater Control Measures
> You must select, design, install, and implement stormwater control measures (including best management practices) to minimize pollutant discharges that address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in
> Part 2.1.2, meet limits contained in applicable effluent limitations guidelines in Part 2.1.3,
> and meet the water quality-based effluent limitations in Part 2.2.
> The selection, design, installation, and implementation of control measures to comply

with Part 2 must be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part 6.2.4. You must modify your stormwater control measures
per Part 5.1 if you find that your control measures are not achieving their intended effect of minimizing pollutant discharges (i.e., your discharges will be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards or meet any of the other non-numeric effluent limits in this permit). Regulated stormwater discharges from your facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at your facility.

2.1.1 Stormwater Control Measure Selection and Design Considerations. You must consider
the following when selecting and designing control measures:

2.1.1.1 Preventing stormwater from coming into contact with polluting materials is generally
more effective, and less costly, than trying to remove pollutants from stormwater;

2.1.1.2 Using stormwater control measures in combination may be more effective than using
control measures in isolation for minimizing pollutants in your stormwater discharge;

2.1.1.3 Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective stormwater control measures that will achieve the limits in this permit;

2.1.1.4 Minimizing impervious areas at your facility and infiltrating stormwater onsite (including
bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce the frequency and volume of discharges and improve ground water recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;

2.1.1.5 Attenuating flow using open vegetated swales and natural depressions can reduce instream impacts of erosive flows;

2.1.1.6 Conserving and/or restoring riparian buffers will help protect streams from stormwater
discharges and improve water quality;

2.1.1.7 Using treatment interceptors (e.g., swirl separators and sand filters) maybe appropriate
in some instances to minimize the discharge ofpollutants; and

2.1.1.8 Implementing structural improvements, enhanced/resilient pollution prevention measures, and other mitigation measures can help to minimize impacts from

stormwater discharges from major storm events [~~that cause extreme flooding conditions~~]
such as hurricanes, storm surge, extreme/heavy precipitation[5] and flood events. If such
stormwater control measures are already in place due to existing requirements mandated
by other state, local or federal agencies, you should document in your SWPPP a brief description of the
controls and a reference to the existing requirement(s). If your facility may be exposed to or has previously experienced such major storm events[6] additional stormwater control measures that may be considered include, but are not limited to:

a. Reinforce materials storage structures to withstand flooding and additional exertion of force;

b. Prevent floating of semi-stationary structures by elevating to the Base Flood Elevation (BFE)[7] level or securing with non-corrosive device;

c. When a delivery of exposed materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate (refer to emergency procedures);

d. Temporarily store materials and waste above the BFE level;

e. Temporarily reduce or eliminate outdoor storage;

f. Temporarily relocate any mobile vehicles and equipment to higher ground;

g. Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and

h. Conduct staff training for implementing your emergency procedures at regular intervals.

Note: Part 2.1.1 requires that you must consider Parts 2.1.1.1 through 2.1.1.8 when selecting and designing control measures to minimize pollutant discharges via stormwater. Part 2.1.1 does not require nor prescribe specific control measure to be implemented; however, you must document in your SWPPP per Part 6.2.4 the considerations made to select and design control measures at your facility to minimize pollutants discharged via stormwater.

5 Heavy precipitation refers to instances during which the amount of rain or snow experienced in a location substantially exceeds what is normal. What constitutes a period of heavy precipitation varies according to location and season. Heavy precipitation does not necessarily mean the total amount of precipitation at a location has increased—just that precipitation is occurring in more intense or more frequent events.

6 To determine if your facility is susceptible to an increased frequency of major storm events that could impact the discharge of pollutants in stormwater, you may reference FEMA, NOAA, or USGS flood map products at https://www.usgs.gov/faqs/where-can-i-find-flood-maps?qt-news_science_products=0#qtnews_science_products.

7 Base Flood Elevation (BFE) is the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1–A30, AR, AR/A, AR/AE, AR/A1– A30, AR/AH, AR/AO, V1–V30 and VE. (Source:

https://www.fema.gov/node/404233). The FEMA Flood Map Service Center can be accessed through https://msc.fema.gov/portal/search.

From: Houlihan, Damien <houlihan.damien@epa.gov>
Sent: Thursday, April 9, 2020 10:39 AM
To: Gray, Davidj <gray.davidj@epa.gov>
Subject: RE: Incorporating increase precipitation into SW permits

Thanks, Dave. Super helpful. Let me know your thoughts.

Damien

Damien Houlihan, Chief
Industrial Permits Section
US EPA
617 918-1586

From: Gray, Davidj <gray.davidj@epa.gov>
Sent: Thursday, April 09, 2020 10:27 AM
To: Houlihan, Damien <houlihan.damien@epa.gov>
Subject: Re: Incorporating increase precipitation into SW permits

Hi Damien,

Ex. 5 - Delib. Process [redacted]

I'll take a look at Samir's summary now and do some more thinking on it.

Thanks,

Dave

From: Houlihan, Damien <houlihan.damien@epa.gov>
Sent: Wednesday, April 8, 2020 11:00 AM
To: Gray, Davidj <gray.davidj@epa.gov>
Subject: RE: Incorporating increase precipitation into SW permits

Thanks, Dave. Ex. 5 - Delib. Process [redacted]

After you get a chance to take a look, I think it makes sense to get the team together for a call with you. Thanks.

Damien
Damien Houlihan, Chief
Industrial Permits Section
US EPA
617 918-1586

From: Gray, Davidj <gray.davidj@epa.gov>
Sent: Wednesday, April 08, 2020 10:17 AM
To: Houlihan, Damien <houlihan.damien@epa.gov>
Subject: Re: Incorporating increase precipitation into SW permits

Hi Damien - Doing well thanks and hope you are too!

Yes, I'm happy to discuss and review permit documents. Not very hard hitting, but basically the Draft 2020 MSGP is specifically requesting comment on requiring operators to *consider* certain enhanced controls to address major storms that cause extreme flooding and how best to identify facilities that are at high risk of impact.

(Though you won't find mention of climate change or sea-level rise anywhere; rather it is kept in terms of flooding and FEMA maps.) The enhanced controls are mostly commonsensical consistent emergency planning procedures to prevent the inundation of materials and equipment to mitigate pollutant discharges, ranging from temporarily moving materials upland or above flood elevation to more significant improvements of elevating or otherwise securing structures in the flood zone.

Ex. 5 - Delib. Process [redacted].

Dave

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From: Houlihan, Damien <houlihan.damien@epa.gov>
Sent: Tuesday, April 7, 2020 11:01 AM
To: Gray, Davidj <gray.davidj@epa.gov>
Subject: Incorporating increase precipitation into SW permits

Good morning, David –

Hope you are doing well. As you know we're working on several permits for bulk terminal facilities in Chelsea. The are mostly SW permits, but do include some conditions related to hydrostatic test water and some other minor discharges.
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Anyway, we anticipate receiving comments relative to BMPs and SWPPP related to climate change. CLF has sued Exxon-Mobile for not addressing increased precipitation (and possibly sea level rise) in their current permit's BMPs/SWPPP. The court recently stayed that case pending re-issuance of that permit. In effect, the judge said EPA should figure this out rather than the courts. Our plan is to first issue the Chelsea Creek permits, and then turn to Exxon's.

Shauna has been looking through the proposed 2020 MSGP and has incorporated some language from it. We're hoping we can have you provide some insight as to HQ thinking on this issue, how it's described in the draft MSGP, and then review our fact sheet and permit conditions related to it.

I understand you'll be starting your 30 day acting gig tomorrow, but I was hoping you'd still have some time. Please let me know if you can help review. Thanks.

Damien

Damien Houlihan, Chief
Industrial Permits Section
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